

## STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT SECRETARY

November 13, 2007

Mr. Harold Hilfiker Hilfiker Retaining Walls 1902 Hilfiker Lane Eureka, CA 95503

Subject: Approval of Hilfiker's Reinforced Soil Embankment (RSE) System

Dear Mr. Hilfiker:

The Geotechnical Engineering Unit (GEU) has fully approved Hilfiker's Reinforced Soil Embankment (RSE) System for use on North Carolina Department of Transportation (NCDOT) projects in accordance with the "NCDOT Policy for Mechanically Stabilized Earth Retaining Walls". This policy may be obtained from:

http://www.ncdot.org/doh/preconstruct/highway/geotech/msewalls/

While a Highway Innovative Technology Evaluation Center (HITEC) report is not available for the RSE System, typical details, material specifications, example calculations and a field construction manual have been submitted and this approval is based on NCDOT's experience with the system before implementation of the NCDOT MSE Retaining Wall Policy in December, 2007.

The following materials are defined as miscellaneous components in accordance with NCDOT's Standard Mechanically Stabilized Earth Retaining Walls Special Provision.

- Felt Bearing Pads
- Dowels for coping
- Panel Anchors
- Filter Fabric
- Alignment and Connection Pins

Miscellaneous components provided by Hilfiker Retaining Walls are required and approved for use. While the MSE Retaining Walls Special Provision prohibits splices in the reinforcement, the connection just behind the panels between the reinforcement mats and panel anchors is not considered a splice and will be allowed. The provision may be obtained from: <a href="http://www.ncdot.org/doh/preconstruct/highway/geotech/provnote/">http://www.ncdot.org/doh/preconstruct/highway/geotech/provnote/</a>

MAILING ADDRESS:

NC DEPARTMENT OF TRANSPORTATION GEOTECHNICAL ENGINEERING UNIT 1589 MAIL SERVICE CENTER RALEIGH NC 27699-1589 TELEPHONE: 919-250-4088 Fax: 919-250-4237

Website: www.ncdot.org./doh

LOCATION: CENTURY CENTER COMPLEX ENTRANCE B-2 1020 BIRCH RIDGE DRIVE RALEIGH NC 27610 November 13, 2007 Mr. Harold Hilfiker Page 2

If you have any questions, I can be reached at (919) 250-4088.

Sincerely,

Njoroge W. Wainaina

State Geotechnical Engineer

cc: K. J. Kim, Ph.D., P.E., Eastern Regional Geotechnical Manager (w/ submittal)
John Pilipchuk, L.G., P.E., Western Regional Geotechnical Manager (w/ submittal)

Don Moore, L.G., Geotechnical Contract Administrator (w/ submittal)

Greg Perfetti, P.E., State Bridge Design Engineer

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Rodger Rochelle, P.E., State Alternative Delivery Engineer

Tommy Cozart, P.E., Special Design Engineering Supervisor

Randy Garris, P.E., State Contract Officer

Mike Robinson, P.E., State Bridge Construction Engineer

Dan Holderman, P.E., State Bridge Maintenance Engineer